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| APPLICATION NO.  | FILING DATE           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------------|----------------------|---------------------|------------------|
| 09/980,471   | 03/26/2002            | Peter E. R. Mucci    | BARK118326          | 3423             |
| 26389  | 7590 03/26/2004       | EXAMINER             |                     |                  |
| CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE |                       |                      | NGUYEN, DANNY       |                  |
| SUITE 2800   |                       |                      | ART UNIT            | PAPER NUMBER     |
| SEATTLE, V   | /A 98101-234 <u>7</u> |                      | 2836                |                  |

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary   | Application No. 09/980,471   | Applicant(s)   |  |  |  |
|---|--|--|--|--|--|
| Office Action Summany   | 09/980,471   | $M \cap C \subset C \cap \Gamma \cap \Delta \Gamma$  |  |  |  |
| CHIEP ACHON SHIMMALV  |  | MUCCI ET AL.   |  |  |  |
| omec Action Cummary   | Examiner   | Art Unit   |  |  |  |
| The MANUALC DATE of this communication and  | Danny Nguyen   | 2836   |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | Sears on the cover sheet with the C  | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of a Failure to reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONEI   | nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). |  |  |  |
| Status  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 23 O   | October 2003.  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ☑ This  | action is non-final.   | •  |  |  |  |
| , <del>-</del>  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |  |  |  |
| Disposition of Claims   |  |  |  |  |  |
| 4) ☐ Claim(s) 1-17 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-17 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or  | wn from consideration.   |  |  |  |  |
| Application Papers  |  |  |  |  |  |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.  | epted or b) objected to by the E<br>drawing(s) be held in abeyance. See<br>tion is required if the drawing(s) is obj   | e37 CFR 1.85(a).<br>ected to. See 37 CFR 1.121(d).⁄  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list  | s have been received. s have been received in Application in the second in Application in the second | on No  In this National Stage  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date   | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa  |  |  |  |  |

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#### **DETAILED ACTION**

1. The indicated allowability of claims 3-5, and 16 are withdrawn in view of the newly discovered reference(s) to Napoli (USPN 4,392,009) and Lindmayer (USPN 4,139,399). Rejections based on the newly cited reference(s) follow.

## Claim Objections

2. Claims 10 and 11 are objected to because of the following informalities: the phrase "electrical communication" should be changed to "electrical connection".

Appropriate correction is required.

#### Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/22/2003 has been entered.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Regarding claim 8, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claim 1, 2, 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Napoli (USPN 4,392,009).

Regarding to claims 1, 2, 14, 15, Napoli discloses a solar tile assembly (see fig. 1) comprises a removable outer panel (11), that comprises photovoltaic means (12) and a first electric connector (19), and an inner support structure (13 and 16) that comprises a second electric connector (30), the assembly being such that in use bring together the outer panel and the inner support structure causes the first electrical connector and the second electrical connector to be brought together into an electrical connection (e.g. col. 1, lines 48-50). Note that the outer panel is slid toward to the inner support structure via flanges (14). When the outer panel and the inner structure are brought together, they cause the first electrical connector (19) and the second electrical connector (30) to be connected via the aperture (33). Thus the first connector of the outer panel and the

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second connector of the inner support structure are brought into an electrical connection.

Regarding claims 16 and 17, Napoli discloses a method for providing an electrical connection for solar assembly (fig. 1) comprises a removable outer panel (11) that comprises a photovoltaic means (12) and a first electrical connector (19) and an inner support structure (13 and 16) that comprises a second electrical connector (30), the method comprises sliding the outer panel (11) towards the inner structure (13 and 16) in a direction substantially parallel to the plane of the outer panel until the first connector contacts the second connector (by sliding the panel 11 parallel with the channel 13 via flanges 14 (e.g. col. 1, lines 48-50) (shown in fig. 1-4).

6. Claim 1, 2, 6, 7, 9-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lindmayer (USPN 4,139,399).

Regarding to claims 1, 2, 14, 15, Lindmayer discloses a solar tile assembly (see fig. 1) comprises a removable outer panel (11), that comprises photovoltaic means (30) and a first electric connector (38), and an inner support structure (10) that comprises a second electric connector (40), the assembly being such that in use bring together the outer panel and the inner support structure causes the first electrical connector and the second electrical connector to be brought together into an electrical connection (e.g. col. 3, lines 20-25).

Regarding claim 3, Lindmayer discloses the outer panel (11) is slidable attached to the inner support structure (10) by attachment means (24, 25, 27, col. 3, lines 5-9)

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comprises a channel section (12, 14, 16) formed to receive an attachment element (24 and 25).

Regarding claims 4 and 5, Lindmayer discloses the outer panel (11) comprises a pair of attachment elements (27) and the inner support structure is formed with a pair of channels (12, 14, 16) for receiving and retaining the attachment elements of the outer panel.

Regarding claims 6 and 7, Lindmayer discloses the electrical connection between the first connector (38) and the second electrical connector (40) is broken by sliding the outer panel in a direction that is substantially parallel to plane of outermost surface of the outer panel (shown in fig. 1).

Regarding claim 9, Lindmayer discloses the inner support structure (10) comprises an electrical junction box (42) that comprises the second electrical connector (40).

Regarding claim 10, Lindmayer discloses the junction box (42) comprises an input terminal and output terminal to provide electrical communication between corresponding solar tile (col. 3, lines 30-32).

Regarding claim 11, Lindmayer discloses the outer panel (11) comprises a junction box (34, 36, 38) formed with the first electrical connector (38). The first connector and the second connector provide electrical communication between the two boxes (col. 3, lines 20-32).

Regarding claim 12, Lindmayer discloses the support structure (10) comprises means (40) for providing electrical connections between the adjacent solar cells (30).

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Regarding claim 13, Lindmayer discloses the means comprises an electrical connector (38) on opposite sides of the support structure.

Regarding claims 16 and 17, Lindmayer discloses a method for providing an electrical connection for solar assembly (fig. 1) comprises a removable outer panel (11) that comprises a photovoltaic means (30) and a first electrical connector (38) and an inner support structure that comprises a second electrical connector (40), the method comprises sliding the outer panel (11) towards the inner structure (10) in a direction substantially parallel to the plane of the outer panel until the first connector contacts the second connector (40) (e.g. col. 3, lines 20-32).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Napoli.

  Napoli does not disclose the solar assembly (11), which is attached to the outer surface of the structure. However, Napoli teaches that the solar assembly of Napoli is lightweight and assembles quickly and easily (see col. 1, lines 11-20). One of ordinary skill in the art would have been recognize the benefits and would utilizes Napoli's solar assembly on surface of any structure.

### Response to Arguments

8. Applicant's arguments filed 10/23/2003 have been fully considered but they are not persuasive.

Regarding to claims 1, 14 and 15, applicant argued that Napoli does not disclose bring together the outer panel and the inner support structure causes the first electrical connector and the second electrical connector to be brought together into an electrical connection. Napoli discloses a solar assembly structure (fig. 1-4) comprises the outer panel (11) and the inner support structure (13 and 16). The outer panel is slid toward to the inner support structure via flanges (14). When the outer panel and the inner structure are brought together, they cause the first electrical connector (19) and the second electrical connector (col. 3, lines 11-15) to be connected via the aperture (33). Thus the first connector of the outer panel and the second connector of the inner support structure are brought into an electrical connection (see col. 1, lines 48-50). Note that Napoli discloses wires that are potted in the junction box (30) (col. 3, 24-27) lines, which are fixed the wires in place. This means the wires are fixed in place; further the junction box is illustrated as having a bottom such as in fig. 2, one can see the t within the aperture 33, pin/brush type connection are illustrated. When the end is connected, the pin/brush structures are placed in electrical connection with the bus bar. Therefore, applicant's arguments of claims 1, 14, and 15 do not distinguish over Napoli.

#### Conclusion

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN DN 3/11/2004

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